

## DOCUMENT RESUME

ED 074 103

TM 002 466

AUTHOR Cusick, Patricia; Harckham, Laura D.  
TITLE The Effectiveness of Six Personality Variables in Predicting Success on the Nursing State Board Examination.  
PUB DATE Feb 73  
NOTE 6p.; Paper presented at the annual meeting of the American Educational Research Association, New Orleans, Louisiana, February, 1973  
EDRS PRICE MF-\$0.65 HC-\$3.29  
DESCRIPTORS \*Certification; Higher Education; Medical Education; \*Nursing; \*Personality Tests; \*Predictive Ability (Testing); Predictor Variables; Psychological Characteristics; Speeches; \*Success Factors; Technical Reports  
IDENTIFIERS Personal Preference Schedule

## ABSTRACT

A study was conducted to determine whether six personality variables, presently used in admissions decisions by a nursing school, were effective predictors of success on the State Board Examination (SBE), the nursing licensing examination. The personality variables were measured by subtests of the Personal Preference Schedule of the Psychological Corporation Examination for Schools of Nursing--achievement, orderliness, persistence, congeniality, altruism and respectfulness. Ss were two classes of nursing students in 1968 and 1969 (N=7). Ss were given the PPS prior to entering the nursing school. The SBE, taken after completion of the 24-month program, was a composite score of five subtests--medical, surgical, obstetrical, pediatric and psychiatric nursing. Pearson product-moment coefficients of correlation were computed for each predictor variable with the criterion and with each other predictor variable. The scales apparently have little value in predicting success on the SBE, but the small sample size should be considered in interpretation. It is recommended that other personality measures be studied as predictors. (KM)

FILMED FROM BEST AVAILABLE COPY

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIG-  
INATING IT. POINTS OF VIEW OR OPIN-  
IONS STATED DO NOT NECESSARILY  
REPRESENT OFFICIAL OFFICE OF EDU-  
CATION POSITION OR POLICY

THE EFFECTIVENESS OF SIX PERSONALITY VARIABLES IN PREDICTING SUCCESS  
ON THE NURSING STATE BOARD EXAMINATION

Patricia Cusick  
St. John's Hospital  
Yonkers, New York

and

Laura D. Harckham  
Manhattan College  
Bronx, New York

A paper presented at the 1973 Annual Meeting  
of the American Educational Research Association

New Orleans, Louisiana  
February, 1973

One of the most important problems faced by the nursing profession is the necessity to attract and encourage able applicants to pursue nursing as a career. Owen (1970) noted that the deficit in nursing services had never been as critical as it was, and there were forecasts that it would increase beyond 125,000 nurses, as estimated by Cornelius (1968). Abdellah (1970) reported that problems of recruitment, selection, and retention of nursing students continued to be paramount. According to Smeltzer (1965), no professional group approached the problem of selecting students with greater care than did nurse administrators. Yet, attrition rates continued to soar. Thurston (1961) reported that student withdrawals from nursing schools varied between 21% and 51%.

The dropout rate could be lowered appreciably if failure could be limited as a factor in dropping out. Better predictive efficiency could insure that those accepted by nursing schools would be successful in their programs.

Investigators have studied a number of personality variables in attempting to predict performance in a nursing program, but no clearcut evidence has been presented to indicate that any one variable has been an effective predictor in a number of nursing school situations. Levitt, Lubin, and DeWitt (1971) attempted to develop an objective test battery for the selection of nursing students. A sample of 425 subjects was obtained by using the sophomore class in a collegiate nursing program for four successive years. The battery of tests included: Edwards Personal Preference Schedule (EPPS); the Kuder Preference Record (KPR); the Institute for Personality and Ability Testing Anxiety Scale (IPAT); the Minnesota Multiphasic Personality Inventory (MMPI); the Kerr Empathy Test; and the California Capacity Questionnaire. The authors found that dropouts were more willing to acknowledge psychopathological

tendencies (MMPI F), more likely to experience overt anxiety (IPAT B/A), somewhat more inclined to sociopathic behavior (MMPI Pd), and were noticeably less interested in outdoor activities (KPR O) than the graduates.

Wittmeyer, Camiscioni, and Purdy (1971) made a longitudinal study of the reasons for attrition in a group of 119 collegiate nursing students to discriminate among three groups: those who successfully completed the program, those who transferred out of nursing into other colleges, and those who dropped out of higher education. A secondary purpose was to predict State Board Examination scores for those students who completed the program. Predictors were: American College Test Battery (ACT), Sixteen Personality Factor Questionnaire (16 PF), the Myers-Briggs Type Indicator (MBTI), and the Prenursing Point-Hour Ratio (PNPHR). The PNPHR was the best overall predictor, and the inclusion of MBTI and 16 PF increased its predictive ability.

Johnson and Leonard (1970) attempted to distinguish nursing students from female college students in general and to predict success on the basis of personality variables. Theory grades were significantly correlated with College Qualification Tests Numerical and Total scores, 16 PF Factor B, and Strong Vocational Interest Blank for Women academic achievement scales. None of the test scores was significantly related to practice grades.

The present study was undertaken to determine whether six personality variables, presently used in admissions decisions by a nursing school, were effective predictors of success on the State Board Examination (SBE), which is the nursing licensing examination. It was estimated by the school that the cost of educating each of its nursing students was \$14,000 for two years. High attrition rates could

prove to be financially deleterious to this school in particular and to the nursing profession in general.

The personality variables were measured by subtests of the Personal Preference Schedule (PPS) of the Psychological Corporation Examination for Schools of Nursing: Achievement (ACH), Orderliness (ORD), Persistence (PERS), Congeniality (CONG), Altruism (ALTR), and Respectfulness (RESP).

ACH measures the desire to accomplish something of significance, to attain recognition, to be successful, and ambitiousness. ORD measures the desire to plan and organize details, to be systematic, and to have things neat and orderly. PERS is the willingness to keep at a job until it is finished, to put in long hours, and to be able to stick with a problem until it is resolved. CONG measures the tendency to get along well with others, to be tolerant and understanding, the tendency not to be vengeful, to refrain from becoming angry and blaming others when things go wrong. ALTR measures the tendency to treat others with kindness, to be generous and affectionate, to help those in trouble and to sympathize with those who are hurt or sick. RESP is the willingness to accept leadership, suggestions, and the decisions of others; to conform to customs, to follow suggestions, and to praise others.

Ss were two classes of nursing students in 1968 and 1969 (N=47) who came primarily from public or parochial high schools in Westchester County or the Bronx, New York City, and were of lower-middle or middle class backgrounds. The students were given the PPS prior to entering the nursing school. The SBE, taken after completion of the twenty-four month program, was a composite score of five subtests: Medical, Surgical, Obstetrical, Pediatric, and Psychiatric Nursing.

Pearson product-moment coefficients of correlation were computed for each predictor variable with the criterion and with each other predictor variable, as shown in Table 1.\*

Table 1

Intercorrelations of Predictors and Correlations with Criterion

	ORD	PERS	CONG	ALTR	RESP	SBE
ACH	.209	.216	.555	.036	.259	.098
ORD		.361	.135	.089	.086	-.228
PERS			.031	.297	.393	-.029
CONG				.128	.011	.263
ALTR					.217	.125
RESP						-.485

\*These data differ from those presented in the abstract because of a data processing error which was recently discovered.

It may be observed that although the predictors had low intercorrelations, none of the correlations with the criterion was of sufficient magnitude to be considered useful. The largest, RESP ( $r = -.49$ ), was a negative one.

Multiple  $R$ 's were computed and the largest was found to be .555, for RESP and ORD with SBE. Both of these predictors had negative correlations with the criterion. The  $R$  for RESP and CONG was .549. Addition of other predictor variables did not contribute appreciably.

While the personality test used by the school may have value in providing information to the school about its students, the scales apparently have little value in predicting success on the SBE. (Of course, the small sample size must be considered in interpreting the findings.) A lack of respectfulness and orderliness would seem to contribute in small measure to success, but certainly there must be found some predictor variables with positive contributions.

Before discarding predictor variables in the affective domain, other, possibly more sophisticated, personality measures should be studied. The role of a nurse seems to be pictured by the scale descriptions as a passive, subservient one. The successful nurse of today may no longer be one who works hard cheerfully at the direction of others. Initiative and leadership may be desirable. An examination of the characteristics of today's nurses should be the initial focus of future research.

#### References

- Abdellah, F. Overview of nursing research, 1955-1968: Part 3. Nursing Research, 1970, 19, 239.
- Cornelius, D. A. Changing winds. Minnesota Nurse Accent, 1968, 40, 3-4.
- Johnson, R. W. & Leonard, L. Psychological test characteristics and performance of nursing students. Nursing Research, 1970, 19, 147-150.
- Levitt, E. E., Lubin, B. & DeWitt, C. An attempt to develop an objective test battery for the selection of nursing students. Nursing Research, 1971, 20, 255-258.
- Owen, S. V. & Feldhausen, J. F. Effectiveness of three models of multivariate prediction of academic success in nursing education. Nursing Research, 1970, 19, 517-524.
- Smeltzer, C. H. Psychological evaluations in nursing education. New York: Macmillan, 1965.
- Thurston, R. L. & Feldhausen, J. F. Personality and prediction of success in nursing education. Nursing Research, 1969, 18, 258-262.
- Wittmeyer, A., Camiscioni, J., & Purdy, P. A longitudinal study of attrition and academic performance in a collegiate nursing program. Nursing Research, 1971, 20, 339-347.